

Work Order ID 82680

\*82680\*

Page 1

April-04-12 1:57:27 PM

Item ID: D350-636-011

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Skidtube LH

Stop \*NS2\*

Start Date: 04/04/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 18/04/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/04/05

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2750

F

D3492

C

100

0.00

\*100\*

DOCUMENT CONTROL

DC

0.00

Memo

Document Control

Photocopy blue file and type labels per PPP D350-636-011 CHG 006

Scrubster

JB

for MLJ 12-5-2

B82680LH

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 82680**

April-04-12 1:57:27 PM

**\*82680\***

Page 2

Item ID: D350-636-011

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Skidtube LH

Start Date: 04/04/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 18/04/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

110

0.00

**\*110\***

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750

3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500" deburr.

4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting

5- Drill only two fwd step holes using DT9616. Ensure proper positioning.

6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-1 details). Drill using drill Jig DT8150 &amp; DT8863A for first side only DT8863B for second side (detail B)

7- Clecko DT8863B on second side of tube and drill pilot holes for detail B.  
\*\*\*SECOND SIDE\*\*\*

8- Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open up holes for ground handling and detail C to 0.500" (8 holes per side)

9- Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297"

10- Open up holes of Detail A to 0.297" (total of 2 holes per side)

9/11/04-18  
DP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Work Order ID 82680

\*82680\*

Page 3

April-04-12 1:57:27 PM

Item ID: D350-636-011

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Skidtube LH

Stop \*NS2\*

Start Date: 04/04/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 18/04/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left  
from bending as per QSI 004  
A/R Aluminum Rod batch: M120854 8E 4/04/18

12-Grind welds flush as per Dwg D2750- 8E 4/04/18

120

QC10- Inspect visual per QSI004- ground welds

0.00

\*120\*

QC

Memo

0.00

Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00

\*130\*

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Work Order ID 82680

\*82680\*

Page 4

April-04-12 1:57:27 PM

Item ID: D350-636-011

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Skidtube LH

Stop \*NS2\*

Start Date: 04/04/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 18/04/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

140

Chemical Conversion Coat per QSI005 4.1

0.00

\*140\*

HandFinish

Memo

0.00

Hand Finishing

Handwritten: 12-4-19

150

QC3- Inspect Part Finish

0.00

\*150\*

QC

Memo

0.00

Quality Control

Handwritten: 12-4-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



**Work Order ID 82680**

April-04-12 1:57:27 PM

**\*82680\***

Page 5

Item ID: D350-636-011

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Skidtube LH

Start Date: 04/04/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 18/04/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

0.00

**\*160\***

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Open up holes of Detail C and ground handling to 0.625" (total of 8 holes per side)  
as per dwg D2750.2-Open up holes of Detail B to 0.750" (total of 4 holes per side)  
as per dwg D2750.

3- Open float hole to 0.500" (4 per side)

4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750  
(welding instructions on sheet 8)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R Sikaflex-291

batch: 121221exp. date: 13/01/048- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004  
(welding instructions on sheet 8)

A/R Aluminum Rod

batch: M120854

9- At section AJ-AJ drill out x-bolt spacer to 0.404"

10-Grind welds flush as per Dwg D2750

DC 12/04/19

- DC 12/04/23

3 BT 12/04/24

- 7 CF 12-4-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 82680****\*82680\***

Page 6

April-04-12 1:57:27 PM

Item ID: D350-636-011

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Skidtube LH

Stop **\*NS2\***

Start Date: 04/04/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 18/04/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

11-Spot face ground handling holes section (total of 4 places per side) as per  
dwg D2750

12-Debur holes

170

QC10- Inspect visual per QSI004- ground welds

0.00

**\*170\***

QC

Memo

0.00

Quality Control

180

QC5- Inspect part completeness to step on W/O

0.00

**\*180\***

QC

Memo

0.00

Quality Control

Handwritten notes and signatures:

- Signature: *[Signature]*
- Text: *12-4-25*
- Text: *5/12/04/26*
- Text: *5.7/04/26*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 82680

April-04-12 1:57:27 PM

**\*82680\***

Page 7

Item ID: D350-636-011

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Skidtube LH

Start Date: 04/04/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 18/04/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

190

Pressure Wash per QSI005 4.3

0.00

**\*190\***

HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

*26 12-4-26*

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

**\*200\***

Powdercoat

Powder Coating

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

*3:45 320 OF 4:15*

*IX 12/04/26 M-L*

210

QC7-Inspect Chemical Conversion Coat

0.00

**\*210\***

QC

Quality Control

Memo

Inspect for foreign object per QSI 024

*1 12-4-31 Pto*

*M121134*

W/O: 82680		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
15/4/30	210	PERMANENT CHANGE ST0018 BE Q63 Done <i>[Signature]</i>	BK	12/4/30			

Part No: D350-636-011 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**WorkOrder ID 82680****\*82680\***

Page 8

April-04-12 1:57:27 PM

Item ID: D350-636-011

Accept

**\*N9000040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Skidtube LH

Stop **\*NS2\***

Start Date: 04/04/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 18/04/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220		0.00							
<b>*220*</b>	HandFinishing					1	2	SP	12/04/30
HandFinish	Memo	0.00							
Hand Finishing	1- Install inserts as per Dwg D2750								
230		0.00							
<b>*230*</b>	HandFinishing					1	2	SP	12/04/30
HandFinish	Memo	0.00							
Hand Finishing	1-Inspect for Foreign Objects								
	2-Spray inside of tube with "LPS-3" batch: <u>N/A</u>								
	3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750 SIKA FLEX 241 BATCH: <u>121221</u> EXP DATE: <u>13/01</u>								
	4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube A/R 55-o'ring lube batch: <u>110348</u>								
	5-Coat all exposed fasteners with "LPS Procyon" batch: <u>114596</u>								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Work Order ID 82680

\*82680\*

Page 9

April-04-12 1:57:27 PM

Item ID: D350-636-011 Accept \*N9000040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Skidtube LH  
 Start Date: 04/04/2012 Start Qty: 1.00 \*1\* Cust Item ID:  
 Required Date: 18/04/2012 Req'd Qty: 1.00 \*1\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240	QC5- Inspect part completeness to step on W/O	0.00							
*240*		0.00							
QC	Memo								
Quality Control									
250	Pick Kit	0.00							
*250*		0.00							
Packaging	Memo								
Packaging									
260	QC4- 100% Inspect kits for completeness	0.00							
*260*		0.00							
QC	Memo								
Quality Control	*****ensure antiseize is on AN8C21A bolts*****								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 1

Work Order ID: 82680

\*82680\*

Parent Item: D350-636-011

\*D350-636-011\*

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:I 02.09.25 Rearranged procedure steps KJ  
 IPP Rev:J 06-03-23 As per Rev D JLM  
 IPP Rev:K 06-07.13 As per dsi9343 EC  
 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verf:EC  
 IPP Rev:M 08-04-22 update steps 4, 13 DD verified by:EC  
 IPP Rev:N 08-09-23 revF as per dwg DD verified by:ec  
 IPP Rev:O 09-02-06 apply antiseize on AN8C21A bolts as per PAR09-010  
 DD verf:EC IPP Rev:P 10.06.22 revise  
 seq110 DD verf:EC IPP Rev:Q 10.10.01 as per IIN revH  
 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3492-1		Manufactured	No			230	Each	46.0000	8	8			
*D3492-1*									**	8	(2P)	12/04/30	
Plug													

Location	Loc Qty	Loc Code
FP002 83098 ✓	46	
69531	8	
74444	2	
76235	4	
77037	32	

D3492-3		Manufactured	No			230	Each	1.0000	8	8			
*D3492-3*									**	8	(2P)	12/04/30	
Plug													

Location	Loc Qty	Loc Code
FP-A 83099 ✓	1	
78600	1	

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 2

Work Order ID: 82680

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

\*82680\*

\*D350-636-011\*

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-010

Purchased

No

230

Each

275.0000

8

8

\*NAS1611-010\*

O-RING

\*\*

8

DP

12/04/30

Location

Loc Qty

Loc Code

FP

50

110915

0

120770

50

FP001

225

110915

14

117460

8

118077

1

118612

3

119438

47

120986

50

121166

52

121259 ✓

50

NAS1149D0863J

Purchased

No

250

Each

219.0000

2

2

\*NAS1149D0863.I\*

WASHER

\*\*

JB

12/05/02

Location

Loc Qty

Loc Code

ST298

219

118078

36

119307

83

120308

100

119307

D2744

Manufactured

No

110

Each

46.0000

1

1

\*D2744\*

Cap

\*\*

BL 12/04/18

Location

Loc Qty

Loc Code

LG002

46

62715

1

70881

3

78900

42

April-04-12 1:57:32 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 3

Work Order ID: 82680

\*82680\*

Parent Item: D350-636-011

\*D350-636-011\*

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

15.0000

1

\*D2600-3-BENT\*

Extrusion Bent

\*\*

①

12-04-17

Location

Loc Qty

Loc Code

LG

15

66875

7

73253

1

75021

1

75022

1

75023

1

81330

4

D2743

Manufactured No

160

Each

346.0000

8

8

\*D2743\*

Crossbolt Spacer

\*\*

X

BE 12-04-24  
B 81965 \*8

Location

Loc Qty

Loc Code

LG001

346

67766

4

68251

3

73403

64

74445

1

78603

2

79517

62

D2739

Manufactured No

160

Each

5.0000

1

1

\*D2739\*

350 I Beam

\*\*

12/04/23

Location

Loc Qty

Loc Code

LG

5

72155

1

81508

1

82122

3

①

April-04-12 1:57:32 PM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

April-04-12 1:57:32 PM

Page 4

Work Order ID: 82680

\*82680\*

Parent Item: D350-636-011

\*D350-636-011\*

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3490-3

Manufactured No

160

Each

90.0000

4

4

\*D3490-3\*

Cross Bolt Spacer

\*\*

BE 12/04/24

Location

Loc Qty

Loc Code

LG

88

82016

88

4

LG001

2

78800

2

D3490-1

Manufactured No

160

Each

124.0000

4

4

\*D3490-1\*

Cross Bolt Spacer

\*\*

BE 12/04/24

Location

Loc Qty

Loc Code

LG

115

81976

115

4

LG001

9

62450

2

74875

4

77042

3

ALS4-1032-225

Purchased No

220

Each

2,477.000

38

38

\*ALS4-1032-225\*

Insert

\*\*

38 (28) 12/04/30

Location

Loc Qty

Loc Code

ST281

2454

108696

146

110768

62

118386

55

118966

68

120671

123

121269

2000

ST282

23

120410

10

120451

13

April-04-12 1:57:32 PM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 5

Work Order ID: 82680

\*82680\*

Parent Item: D350-636-011

\*D350-636-011\*

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3793-3

Manufactured No

230

Each

30.0000

1

1

\*D3793-3\*

Wearshoe

\*\*

1

12/04/30

Location

80434 ✓

Loc Qty

Loc Code

FP001

23

23

80434

11

82166

12

FP002

7

78935

7

AN8C35A

Purchased No

230

Each

56.0000

1

1

\*AN8C35A\*

BOLT

\*\*

1

12/04/30

Location

Loc Qty

Loc Code

FP002

55

115960

1

117834

8

118286 ✓

46

ST346

1

114442

0

115188

0

115960

1

D3793-1

Manufactured No

230

Each

26.0000

1

1

\*D3793-1\*

Wearshoe

\*\*

1

12/04/30

Location

Loc Qty

Loc Code

FP001

26

78901

10

82171 ✓

16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 6

Work Order ID: 82680

\*82680\*

Parent Item: D350-636-011

\*D350-636-011\*

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3488-041

Manufactured No

230

Each

11.0000

1

1

\*D3488-041\*

Blade Fitting Assembly, LH

\*\*

1

(DP)

12/04/30

Location

Loc Qty

Loc Code

FP002

82271✓

11

61689

1

75056

2

77021

8

D3794-3

Manufactured No

230

Each

23.0000

1

1

\*D3794-3\*

Gasket

\*\*

1

(DP)

12/04/30

Location

Loc Qty

Loc Code

FP002

23

74530

2

80436✓

21

AN6C44A

Purchased No

230

Each

175.0000

4

4

\*AN6C44A\*

BOLT

\*\*

4

(DP)

12/04/30

Location

Loc Qty

Loc Code

FG

2

103964

2

ST343

173

120143

25

120465

27

120641

1

121013

20

121167✓

100

April-04-12 1:57:32 PM

Shop Packet Print

Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 7

Work Order ID: 82680

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

\*82680\*

\*D350-636-011\*

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased

No

230

Each

115.0000

1

1

\*MS21083C8\*

NUT

\*\*

1

12/04/30

## Location

## Loc Qty

## Loc Code

304

50

121185 ✓

50

FP002

1

115884

1

ST303

6

115884

0

118077

1

119309

2

119436

1

119638

2

ST304

58

120142

8

120731

25

121011

25

D3536-25

Manufactured

No

230

Each

22.0000

1

1

\*D3536-25\*

Gasket

\*\*

1

12/04/30

## Location

## Loc Qty

## Loc Code

FP

14

81342 ✓

14

FP002

8

78902

8

April-04-12 1:57:32 PM

Shop Packet Print

Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

April-04-12 1:57:32 PM

Page 8

Work Order ID: 82680

\*82680\*

Parent Item: D350-636-011

\*D350-636-011\*

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3631-1 Manufactured No

230

Each

243.0000

8

8

\*D3631-1\*

Washer

\*\*

8 (2P) 12/04/30

## Location

## Loc Qty

## Loc Code

FG

100

81874 ✓

100

ST072

143

68062

2

75548

141

D3791-1 Manufactured No

230

Each

9.0000

1

1

\*D3791-1\*

Wearplate

\*\*

1 (2P) 12/04/30

## Location

## Loc Qty

## Loc Code

FP002

9

62239

2

78897

7

AN960C10L \* NAS1149C0332 ✓ Purchased No

82168 ✓

230

Each

0.0000

38

38

\*AN960C10I \*

washer

121509 ✓

\*\*

38 (2P) 12/04/30

D2745 Manufactured No

230

Each

64.0000

8

8

\*D2745\*

Bushing

\*\*

8 (2P) 12/04/30

## Location

## Loc Qty

## Loc Code

FP

62

79518

62

FP001

2

69529

1

76142

1

April-04-12 1:57:32 PM

Shop Packet Print

Page 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 9

Work Order ID: 82680

\*82680\*

Parent Item: D350-636-011

\*D350-636-011\*

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C5A

Purchased

No

230

Each

1,602.000

34

34

\*AN3C5A\*

Bolt

\*\*

34 (2P) 12/04/30

Location	Loc Qty	Loc Code
FP001 121063✓	7	
115835	7	
ST350	1595	
116419	28	
117343	13	
117764	7	
117872	2	
119749	23	
120423	522	
<del>1210168</del>	500	
121255	500	

D3537-1

Manufactured

No

230

Each

26.0000

3

3

\*D3537-1\*

Wearpad

\*\*

3 (2P) 12/04/30

Location	Loc Qty	Loc Code
FG 83255✓	10	
79833	10	
FP002	16	
69817	5	
80337	11	

NAS1149C0832R

Purchased

No

230

Each

295.0000

1

1

\*NAS1149C0832R\*

WASHER

\*\*

1 (2P) 12/04/30

Location	Loc Qty	Loc Code
ST297	295	
114915✓	295	

April-04-12 1:57:32 PM

Shop Packet Print

Page 9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 10

Work Order ID: 82680

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

\*82680\*

\*D350-636-011\*

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C6A

Purchased

No

230

Each

517.0000

4

4

\*AN3C6A\*

BOLT

\*\*

4

2P

12/04/30

Location

Loc Qty

Loc Code

FP001

1

111982

1

ST351

516

111982

2

116419

23

116549

2

116704

12

117619

10

117688

1

117872

5

118422

13

119449

21

120423

27

120693 ✓

400

NAS1611-013

Purchased

No

230

Each

250.0000

8

8

\*NAS1611-013\*

O-RING

\*\*

8

2P

12/04/30

Location

Loc Qty

Loc Code

FP001

250

116582

5

117291

2

117887

53

119623

36

120910

4

121166

100

121259 ✓

50

April-04-12 1:57:32 PM

Shop Packet Print

Page 10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 11

Work Order ID: 82680

\*82680\*

Parent Item: D350-636-011

\*D350-636-011\*

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3535-25

Manufactured No

230

Each

22.0000

1

1

\*D3535-25\*

Wearshoe

\*\*

1 (28) 12/04/30

Location

Loc Qty

Loc Code

FP001

22

62233

1

80331

10

81357 ✓

11

D3794-1

Manufactured No

230

Each

16.0000

1

1

\*D3794-1\*

Gasket

\*\*

1 (28) 12/04/30

Location

Loc Qty

Loc Code

FP002

16

75042

4

80435

12

MS21043-6

Purchased No

230

Each

773.0000

4

4

\*MS21043-6\*

NUT

\*\*

4 (28) 12/04/30

Location

Loc Qty

Loc Code

FG

20

103693

20

ST301

753

112314

47

117887

6

118384 ✓

200

120308

500

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

April-04-12 1:57:32 PM

Page 12

Work Order ID: 82680

**\*82680\***

Parent Item: D350-636-011

**\*D350-636-011\***

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3493-1

Manufactured No

250

Each

54.0000

2

2

✓

**\*D3493-1\***

Washer

\*\*

1x 82023 JB

Location

Loc Qty

Loc Code

ST050

54

70697

2

77573

12

78835

40

1x 78835

MS21083C8

Purchased

No

250

Each

115.0000

2

2

✓

**\*MS21083C8\***

NUT

\*\*

121524 JB 12/05/02

Location

Loc Qty

Loc Code

304

50

121185

50

FP002

1

115884

1

ST303

6

115884

0

118077

1

119309

2

119436

1

119638

2

ST304

58

120142

8

120731

25

121011

25

April-04-12 1:57:32 PM

Shop Packet Print

Page 12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 13

Work Order ID: 82680

\*82680\*

Parent Item: D350-636-011

\*D350-636-011\*

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN8C21A

Purchased

No

250

Each

79.0000

2

2

✓

\*AN8C21A\*

BOLT

\*\*

JB

Location

Loc Qty

Loc Code

ST343

79

118758

5

120094

34

121067

20

121167

20

121067

NAS1515H3L

Purchased

No

230

Each

198.0000

4

4

\*NAS1515H3I \*

WASHER

\*\*

4

2P

12/04/30

Location

Loc Qty

Loc Code

FG

40

102472

40

ST277

158

118686

3

119438

1

120072

8

120360 ✓

96

121243

50

D2741

Manufactured

No

250

Each

67.0000

1

1

✓

\*D2741\*

Blade, 350 Skidtube

\*\*

JB

12/05/02

Location

Loc Qty

Loc Code

ST

-10

ST466

77

71856

1

76984

26

79516

40

79516

April-04-12 1:57:32 PM

Shop Packet Print

Page 13

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-04-12 1:57:32 PM

Page 14

Work Order ID: 82680

\*82680\*

Parent Item: D350-636-011

\*D350-636-011\*

Parent Item Name: Skidtube LH

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3532-1

Manufactured No

250

Each

55.0000

2

2

✓

\*D3532-1\*

Spacer

\*\*

JB 12/05/02

Location

Loc Qty

Loc Code

ST053

55

78839

31

82041

24

82041

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

# GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH:  
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ( $\phi 0.297$ ) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:  
MINIMUM YIELD TENSILE STRENGTH = 35 KSI  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.  
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF  
POWDER COATING WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

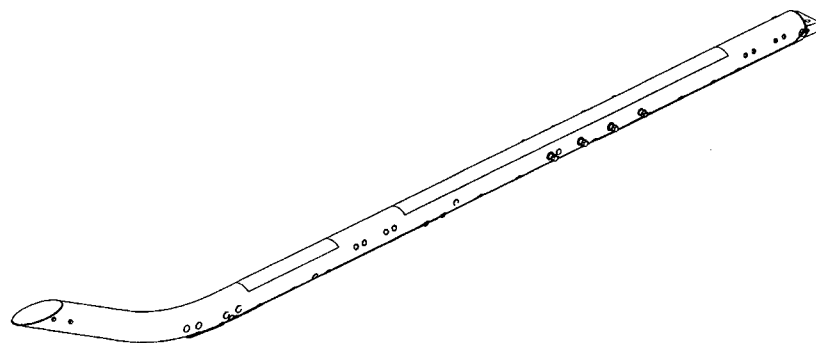
NO. 32689 MLJ

12/04/05

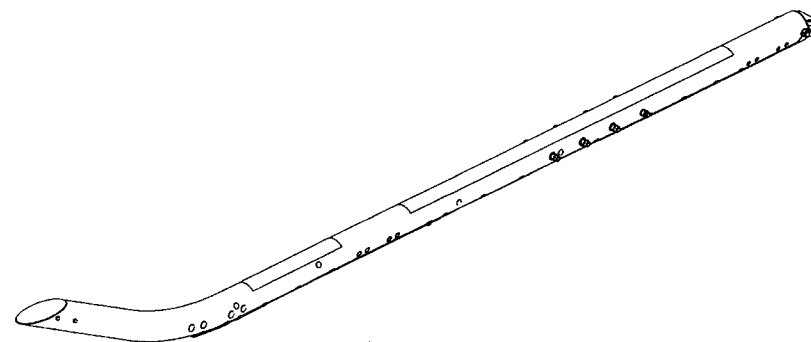
RELEASED

F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/3 REPLACES D3535-13/35 (ZN C8-1); D3794-1/3 REPLACES D3536-13/35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/IAFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS, CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN	PA		
CHECKED	PA		
MFG. APPR.	PA		
APPROVED	PA		
DE APPR.	PA		
DATE	08.07.16		
DART AEROSPACE USA, INC.			
PORT HADLOCK, WA			
DRAWING NO.		REV. F	
D2750		SHEET 1 OF 11	
TITLE		SCALE	
350 SKIDTUBE ASSEMBLY		NTS	
COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.			
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPILED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			

82680



D2750-041 350 SKIDTUBE ASSEMBLY, LH



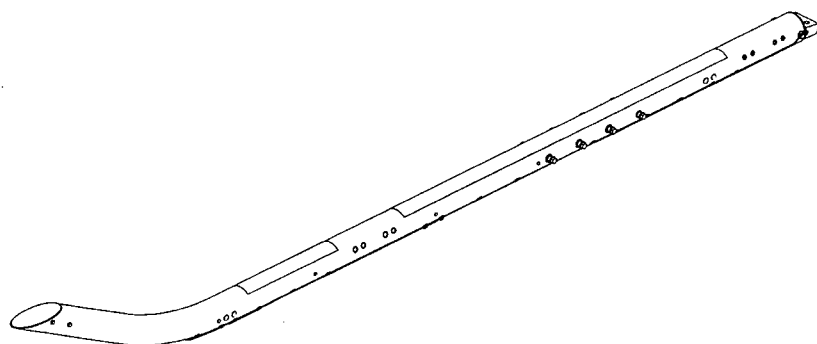
D2750-042 350 SKIDTUBE ASSEMBLY, RH

**RELEASED**  
08.07.16

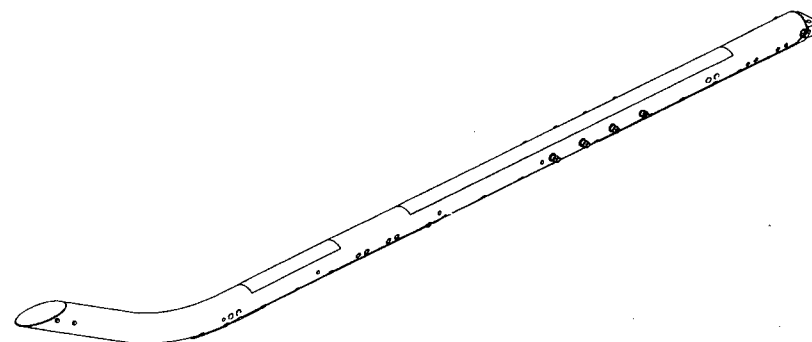
DESIGN	PC	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	AM	PORT HADLOCK, WA	
CHECKED	A	DRAWING NO.	REV. F
MFG. APPR.	NA	<b>D2750</b>	SHEET 2 OF 11
APPROVED	ME	TITLE	SCALE
DE APPR.	ME	<b>350 SKIDTUBE ASSEMBLY</b>	NTS
DATE	08.07.16	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	



82680



D2750-043 350 SKIDTUBE ASSEMBLY, LH

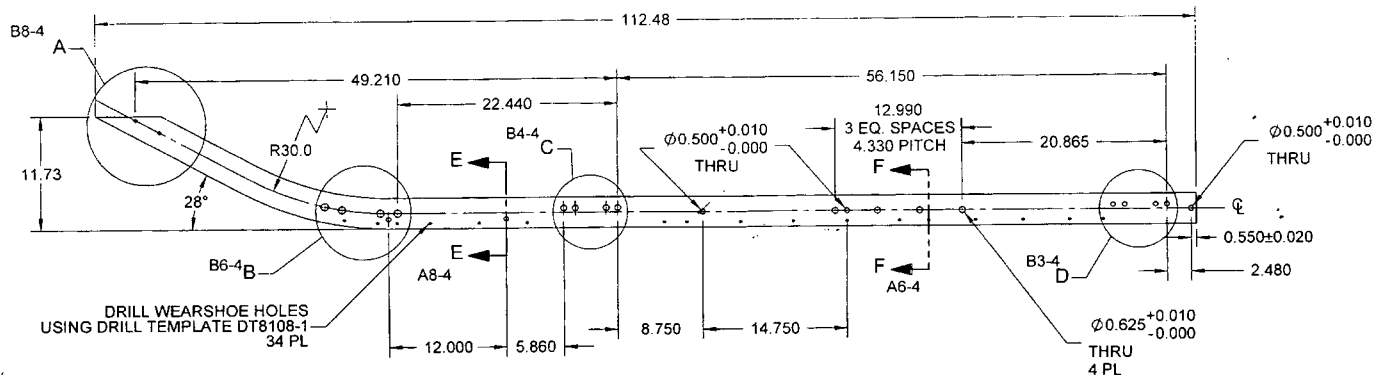


D2750-044 350 SKIDTUBE ASSEMBLY, RH

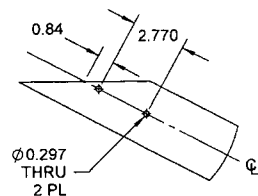
**RELEASED**  
68-9-22/100

DESIGN	PD	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
DRAWN	PD		
CHECKED	NA	DRAWING NO.	REV. F
MFG. APPR.	NA	D2750	SHEET 3 OF 11
APPROVED	NA	TITLE	SCALE
DE APPR.	NA	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

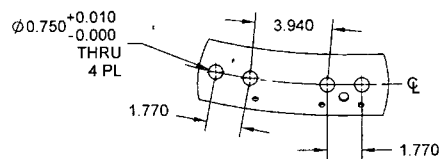




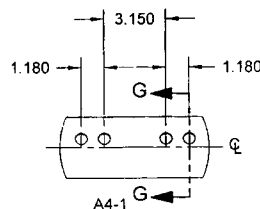
**D2750-1 LH SKIDTUBE**



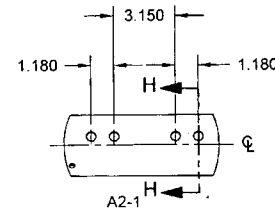
**DETAIL A**  
SCALE 2X



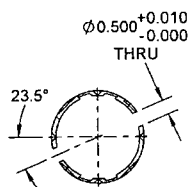
**DETAIL B**  
SCALE 2X



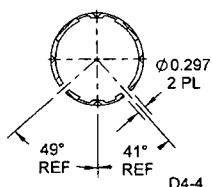
**DETAIL C**  
SCALE 2X



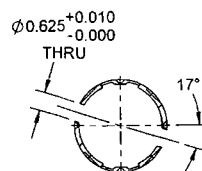
**DETAIL D**  
SCALE 2X



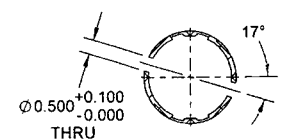
**SECTION E-E**  
SCALE 3X, 2 PL



**SECTION F-F**  
SCALE 3X, 17 PL



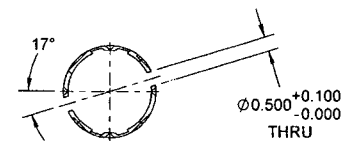
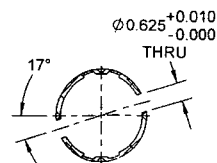
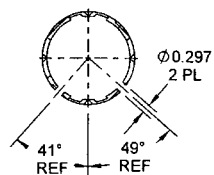
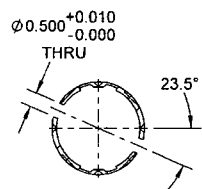
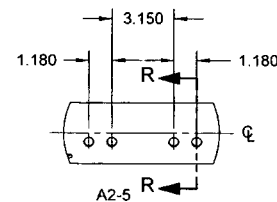
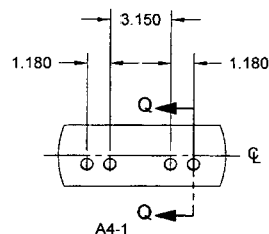
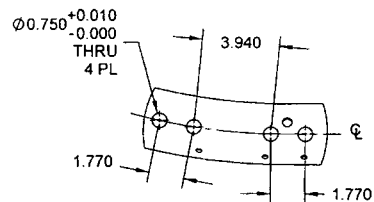
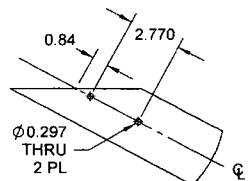
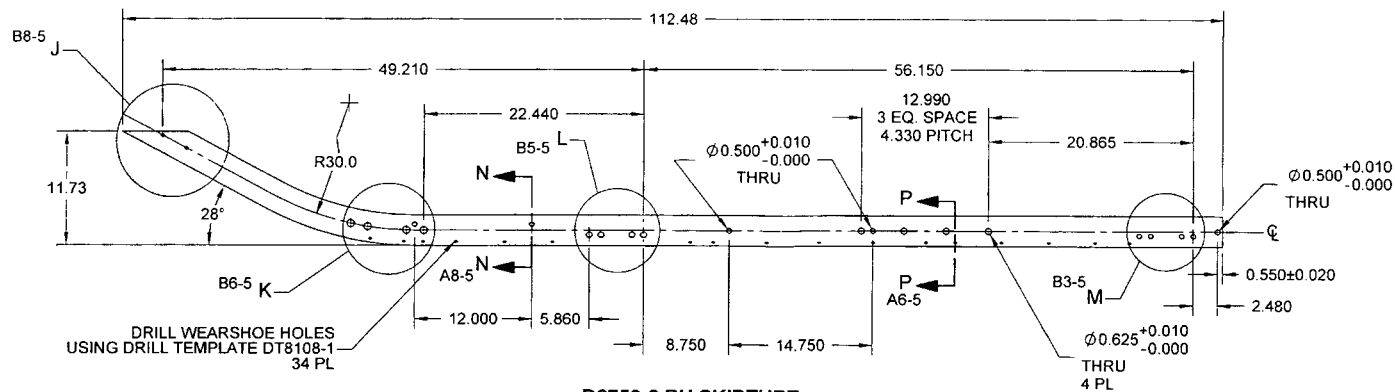
**SECTION G-G**  
SCALE 3X, 4 PL



**SECTION H-H**  
SCALE 3X, 4 PL

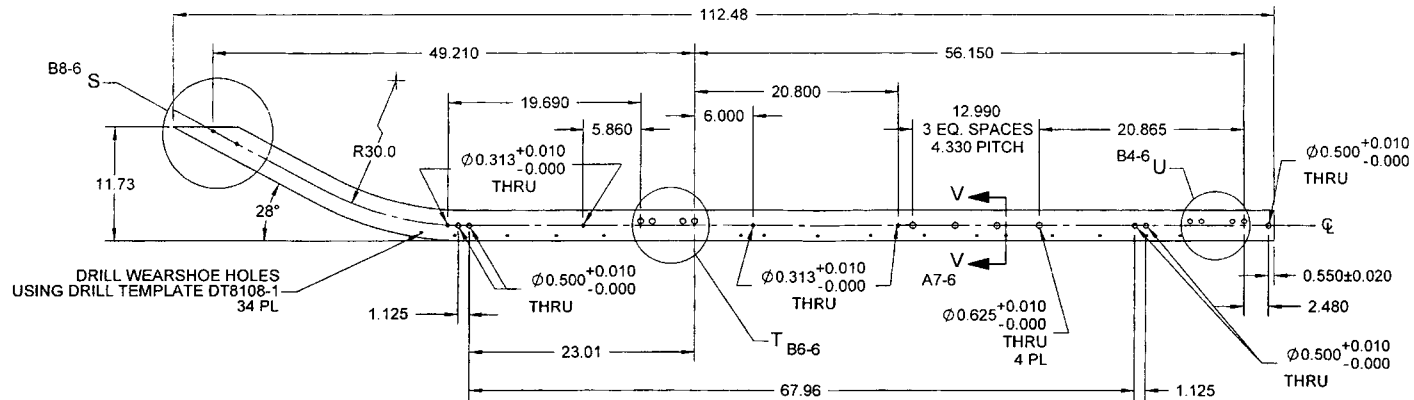
**RELEASED**

DESIGN	PA	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	PA	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 4 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

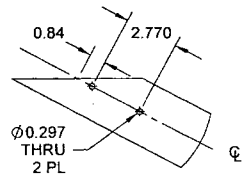


**RELEASED**

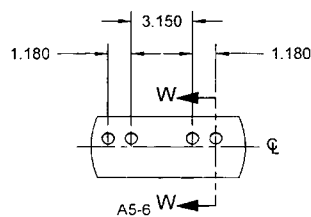
DESIGN	PL	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	PL	PORT HADLOCK, WA	
CHECKED	PL	DRAWING NO. <b>D2750</b>	REV. F
MFG. APPR.	PL	SHEET 5 OF 11	
APPROVED	PL	TITLE	SCALE
DE APPR.	PL	<b>350 SKIDTUBE ASSEMBLY</b>	NTS
DATE	<b>08.07.16</b>	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	



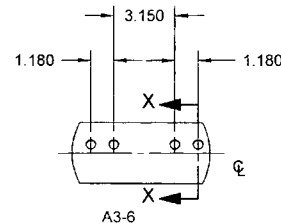
**D2750-3 LH SKIDTUBE**



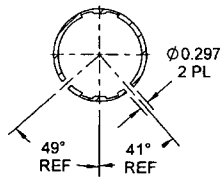
**DETAIL S**  
SCALE 2X



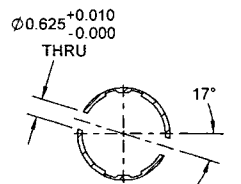
**DETAIL T**  
SCALE 2X



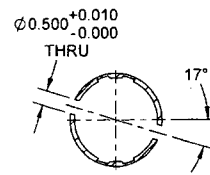
**DETAIL U**  
SCALE 2X



**SECTION V-V**  
SCALE 3X, 17 PL



**SECTION W-W**  
SCALE 3X, 4 PL

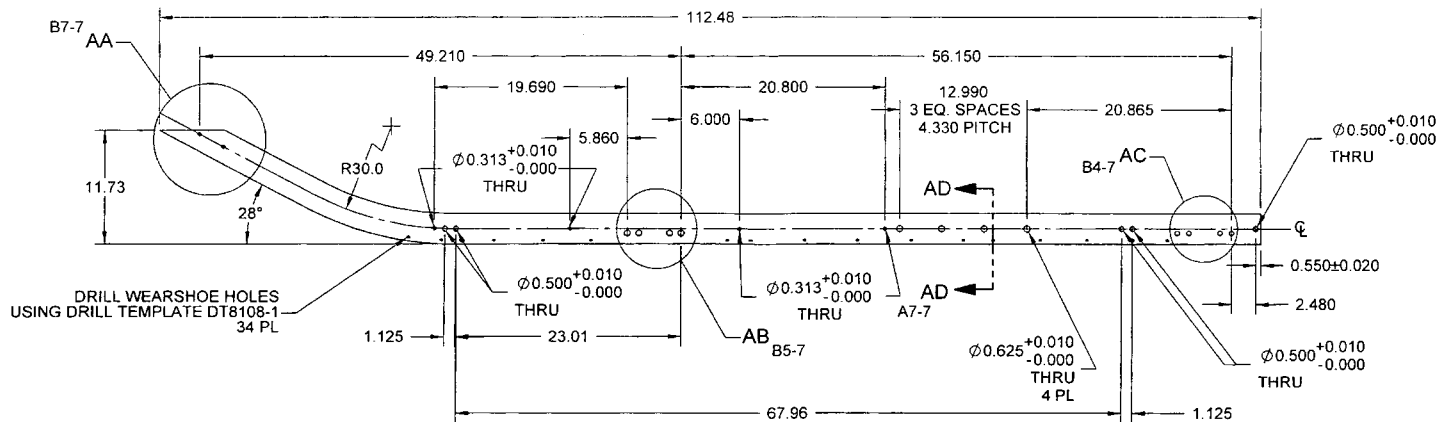


**SECTION X-X**  
SCALE 3X, 4 PL

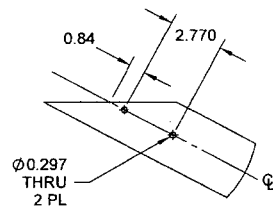
**RELEASED**

DESIGN		<b>DART AEROSPACE USA, INC.</b>
DRAWN		PORT HADLOCK, WA
CHECKED		DRAWING NO. <b>D2750</b>
MFG. APPR.		REV. F
APPROVED		SHEET 6 OF 11
DE APPR.		TITLE <b>350 SKIDTUBE ASSEMBLY</b>
DATE	<b>08.07.16</b>	SCALE <b>NTS</b>

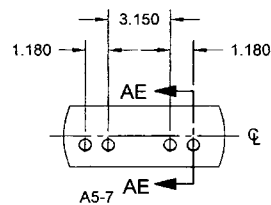
COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.  
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT  
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



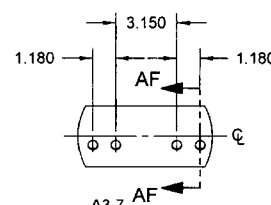
**D2750-4 RH SKIDTUBE**



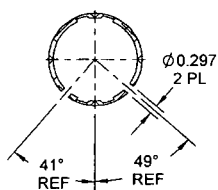
**DETAIL AA**  
D7-7  
SCALE 2X



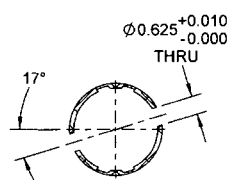
**DETAIL AB**  
C4-7  
SCALE 2X



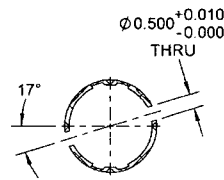
**DETAIL AC**  
D3-7  
SCALE 2X



**SECTION AD-AD**  
D3-7  
SCALE 3X, 17 PL



**SECTION AE-AE**  
B6-7  
SCALE 3X, 4 PL



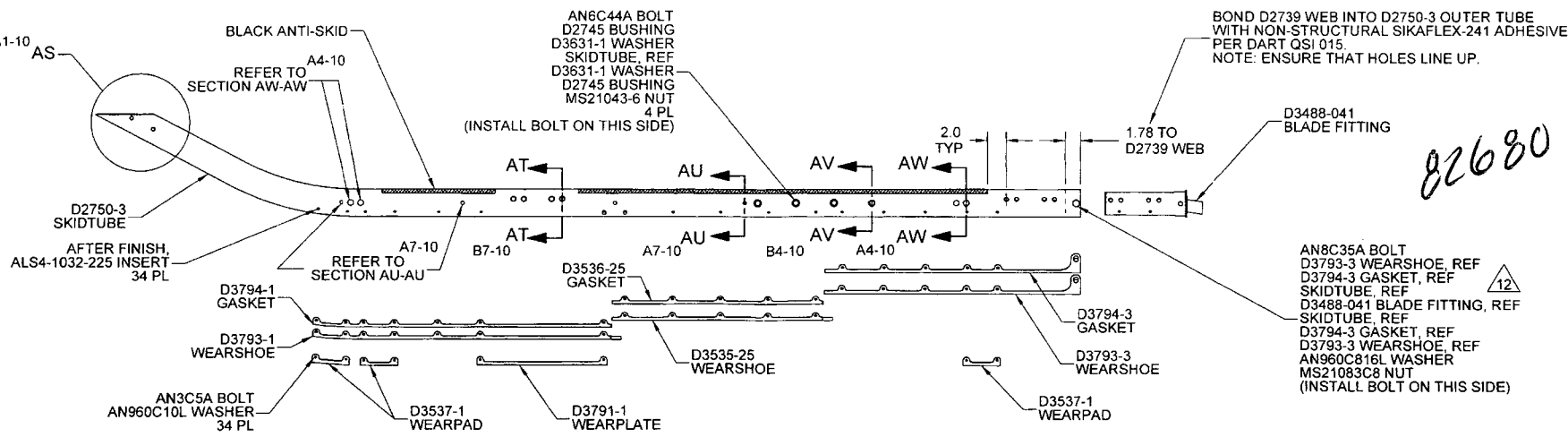
**SECTION AF-AF**  
B4-7  
SCALE 3X, 4 PL

**RELEASED**  
08-04-22-110

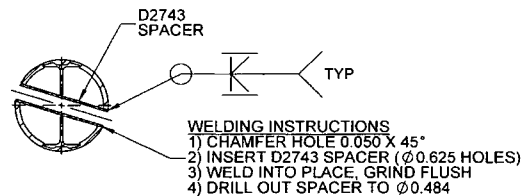
DESIGN	REV. F	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	REV. F	PORT HADLOCK, WA	
CHECKED		DRAWING NO. <b>D2750</b>	REV. F
MFG. APPR.		SHEET 7 OF 11	
APPROVED		TITLE	SCALE
DE APPR.		<b>350 SKIDTUBE ASSEMBLY</b>	NTS
DATE	<b>08.07.16</b>	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	



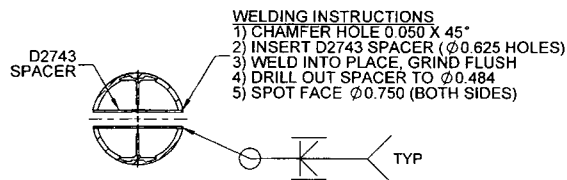
8 7 6 5 4 3 2 1



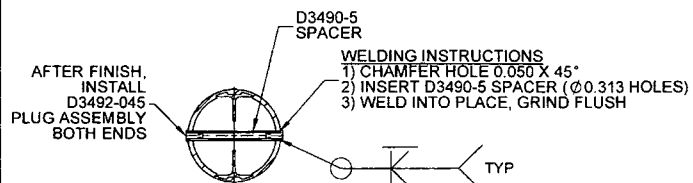
**D2750-043 350 SKIDTUBE ASSEMBLY, LH**



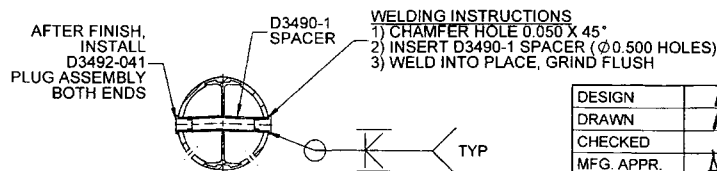
**SECTION AT-AT**  
SCALE 3X, 4 PL



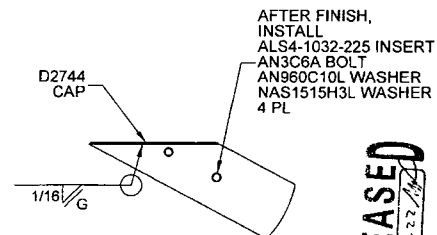
**SECTION AV-AV**  
SCALE 3X, 4 PL  
(HARDWARE REMOVED FOR CLARITY)



**SECTION AU-AU**  
SCALE 3X, 4 PL



**SECTION AW-AW**  
SCALE 3X, 4 PL



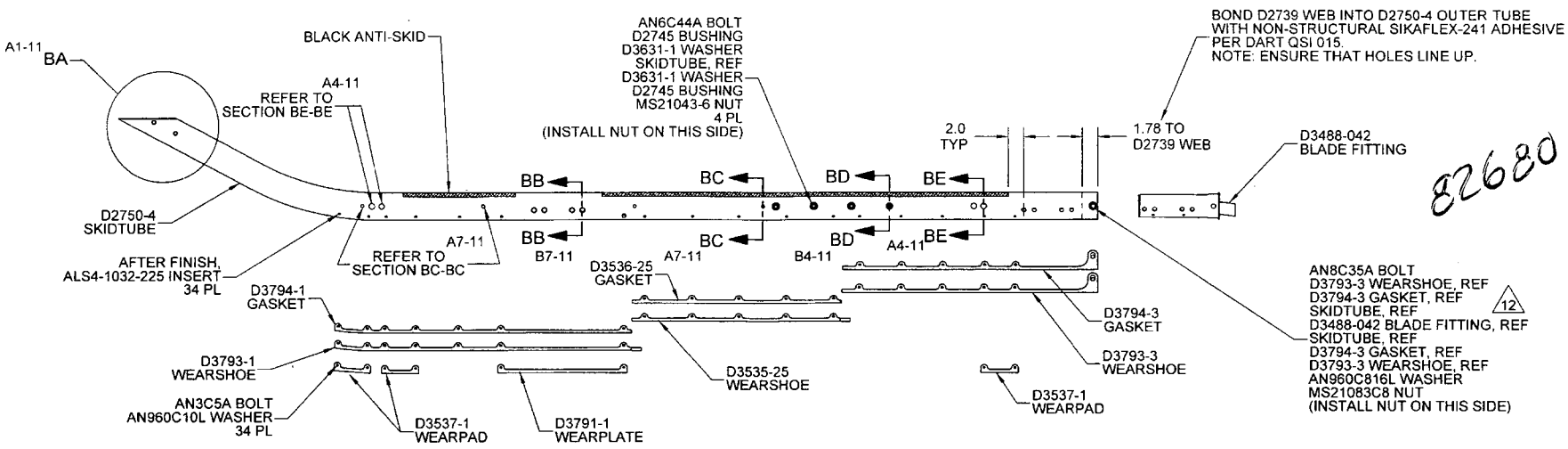
**DETAIL AS**  
SCALE 2X

DESIGN	82680	DART AEROSPACE USA, INC.	
DRAWN	82680	PORT HADLOCK, WA	
CHECKED	82680	DRAWING NO.	REV. F
MFG. APPR.	82680	D2750	SHEET 10 OF 11
APPROVED	82680	TITLE	SCALE
DE APPR.	82680	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS COMPLETION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			

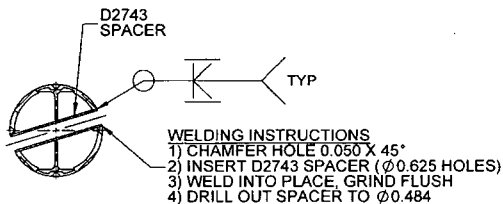
8 7 6 5 4 3 2 1



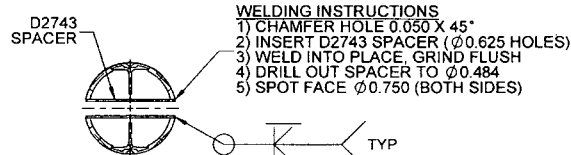
8 7 6 5 4 3 2 1



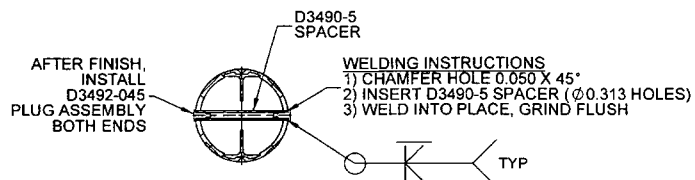
**D2750-044 350 SKIDTUBE ASSEMBLY, RH**



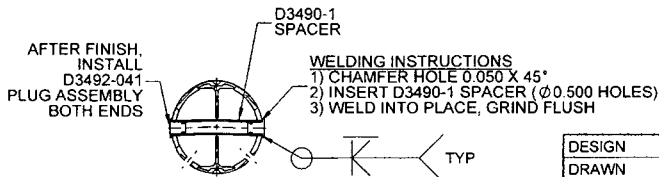
**SECTION BB-BB**  
SCALE 3X, 4 PL



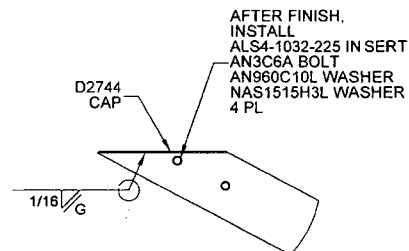
**SECTION BD-BD**  
SCALE 3X, 4 PL  
(HARDWARE REMOVED FOR CLARITY)



**SECTION BC-BC**  
SCALE 3X, 4 PL



**SECTION BE-BE**  
SCALE 3X, 4 PL



**DETAIL BA**  
SCALE 2X

DESIGN	PH	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 11 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



NO. 289

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 81400  
Part number: A350-636-016  
Description: Spindle  
Welding Process: Tig[☒] Mig[ ]  
Base material: Alum  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual:

pass[☒] fail[ ]

Penetration:

pass[☒] fail[ ]

UNACCEPTABLE

Cracks:

pass[☒] fail[ ]

Undercut:

pass[☒] fail[ ]

Pin holes:

pass[☒] fail[ ]

Overlap (cold lap)

pass[☒] fail[ ]

Porosity (surface):

pass[☒] fail[ ]

Coloration:

pass[☒] fail[ ]

Qualifier David Sewell Date of Test Coupon 12.04.17  
Welder Barclay Elliott Date of Test Coupon 12.04.17

The above named individual is qualified in accordance with AWS D17.1.2001 to weld